

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

In the Matter of	)	
	)	
Application of BellSouth Corporation, Pursuant	)	CC Docket No. 01-277
to Section 271 of the Telecommunications Act	)	
of 1996 to Provide In-Region, InterLATA Services	)	
in Georgia and Louisiana	)	

**DECLARATION OF STEVEN E. TURNER  
ON BEHALF OF AT&T CORP.**

**I. INTRODUCTION AND QUALIFICATIONS.**

1. My name is Steven E. Turner. Currently, I head my own telecommunications and financial consulting firm, Kaleo Consulting.

2. I hold a Bachelor of Science degree in Electrical Engineering from Auburn University in Auburn, Alabama. I also hold a Masters of Business Administration in Finance from Georgia State University in Atlanta, Georgia.

3. From 1986 through 1987, I was employed by General Electric in its Advanced Technologies Department as a Research Engineer developing high-speed graphics simulators. I joined AT&T in 1987 and, during my career there, held a variety of engineering, operations, and management positions. These positions covered the switching, transport, and signaling disciplines within AT&T. From 1995 until 1997, I worked in the Local Infrastructure and Access Management organization within AT&T. It was during this tenure that I became familiar

with the many regulatory issues surrounding AT&T's local market entry, and specifically with the issues regarding the unbundling of incumbent local exchange company ("ILEC") networks.

4. I formed Kaleo Consulting in January 1997. I consult primarily on regulatory issues related to facilities-based entry into local exchange service and, using financial models, advise companies on how and where to enter telecommunications markets.

5. I have filed testimony or appeared before commissions in the states of Alabama, Arkansas, California, Colorado, Delaware, Florida, Georgia, Hawaii, Illinois, Indiana, Kansas, Kentucky, Louisiana, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Nevada, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Texas, Washington, and Wisconsin. Additionally, I have filed testimony with the Federal Communications Commission ("Commission" or "FCC") regarding Southwestern Bell Telephone Company's ("SWBT") compliance with Section 271 of the Telecommunications Act of 1996 (the "Act") as well as for cost proceedings regarding the cost of unbundled elements and collocation.

## **II. PURPOSE OF DECLARATION.**

6. The purpose of my declaration is to provide facts regarding BellSouth's provision of interconnection and access, to assist this Commission in determining whether BellSouth "fully implements" the "Competitive checklist" requirements of Section 271(c)(2)(B) for unbundled loops, insofar as they can be used to provide digital subscriber line ("xDSL") services (Checklist Item 4).

### **III. BELLSOUTH DOES NOT PERMIT LINE SHARING OR LINE SPLITTING FOR NGDLC LOOPS.**

7. BellSouth does not fully offer unbundled access to the local loop, because it does not offer any feasible means of line sharing or line splitting in situations where it has deployed a “next generation digital loop carrier” (NGDLC) architecture. BellSouth’s restrictions in this area plainly are inconsistent with the express requirements of Commission rules and Section 251 of the Act. By BellSouth’s own admission, up to *19 percent* of its loops are equipped with NGDLC, and its refusal to comply with the Commission line sharing orders effectively walls off 19 percent of the market from competition for advanced services.

8. Indeed, BellSouth is aggressively offering its voice customers advanced services using digital subscriber line (DSL) technology. To compete, competitive LECs must be able to offer customers advanced services, as well as a combination (bundle) of voice and advanced services. Competitive LECs offer DSL services often by engaging in “line sharing.” Line sharing exists where BellSouth continues to provide the voice portion of the service to the end user customer over the loop while the competitive LEC provides the data portion of the service using the high-frequency portion of the loop (HFPL). The Commission has repeatedly recognized that competitive LECs must have unbundled access to the high frequency portion of the loop, or else competitive LECs’ ability to provide advanced services would be materially diminished, broad facilities-based entry would be delayed, and the scope and quality of competitive LECs’ offerings would be materially limited. *See Line Sharing Order* ¶ 5; *Line Sharing Reconsideration Order* ¶ 5.

9. At the same time, BellSouth is aggressively deploying NGDLC. BellSouth uses this technology to provide the “local loop transmission” between the customer’s premises and

the central office. NGDLC is a telecommunications component that allows carriers to use fiber from the central office out to a remote terminal. At the remote terminal, the NGDLC allows for the fiber to be connected with the copper that continues the loop out to the customer's premises. The "next generation" aspect of NGDLC is that by simply using different plug-in cards, the telecommunications carrier is able to provide voice service only, advanced service only, or combined voice and advanced services. Prior to the deployment of NGDLC, the data service was provided by a separate device known as an xDSL access multiplexer ("DSLAM"), which was deployed at the central office. The DSLAM capability now has been integrated onto a card within the NGDLC, permitting easier provisioning of advanced services.

10. On January 19, 2001, the Commission issued its *Line Sharing Reconsideration Order*. In that order, the Commission clarified that incumbent LECs must provide line sharing even if a customer is served by an NGDLC configuration.<sup>1</sup> In its original *Line Sharing Order*, the Commission had defined the HFPL as the "frequency range above the voiceband on a copper loop facility that is being used to carry analog circuit-switched voiceband transmissions." Some incumbent LECs, including BellSouth, had seized on the Commission's use of the word "copper" in that definition to argue that an incumbent LEC had no obligation to provide unbundled access to NGDLC facilities, which were fiber instead of "copper." In the *Line Sharing Reconsideration Order*, the Commission clarified that "the requirement to provide line sharing applies to the entire loop, even when the incumbent has deployed fiber in the loop (e.g., where the loop is served by a remote terminal)." *Line Sharing Reconsideration Order* ¶ 10. The Commission reiterated that it meant for its definition of the loop to be "technology-neutral," and that it would inconsistent with the goals of the Act and with the *Line Sharing Order* "to permit

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<sup>1</sup> *Line Sharing Reconsideration Order* ¶ 10; see also *id.* at ¶¶ 11 & 13.

the increased deployment of fiber-based networks by incumbent LECs to unduly inhibit the competitive provision of xDSL services.” *Id.* at ¶ 10, 13. The Commission clarified that the competitive LEC must have the option of accessing an NGDLC-equipped loop at either the central office or at the remote terminal. *Id.* at ¶ 11; *see also id.* at ¶ 13.

11. Nevertheless, BellSouth does not comply with these requirements as contained in the *Line Sharing Reconsideration Order*. BellSouth does not permit competitive LECs to obtain access to the entire capabilities of the unbundled NGDLC loop at the central office. Specifically, BellSouth is willing to make the NGDLC loop available to a competitive LEC that wishes to combine the NGDLC loop to a switch port at the central office if and only if the competitive LEC only intends to provide voice service to the end user customer. However, if the competitive LEC wishes to use the full capabilities of the NDGLC loop including the high frequency portion of the loop – as provided for by the FCC in the *Line Sharing Reconsideration Order* and in the Federal Act – the competitive LEC is not permitted to do so by BellSouth. Instead, the competitive LEC must use an inferior (as compared to the NGDLC loop) all copper loop to provide voice and data service to the customer. This is clearly discriminatory in that BellSouth is not limited in this way. BellSouth can serve its end user customers behind the NDGLC and still maintain the benefits of using a fiber-fed loop. BellSouth simply transmits the voice portion of the loop that is split at the remote terminal NGDLC over fiber to the circuit switch located in the central office. BellSouth also simply transmits the data portion of the loop that is also split at the remote terminal NGDLC over fiber to an ATM switch where the data is then directed to the data service provider BellSouth utilizes. BellSouth should provide nondiscriminatory access to these same capabilities as required by the FCC in the *Line Sharing Reconsideration Order*.

12. Second, BellSouth does not permit competitive LECs to efficiently obtain access to NGDLC loops at the remote terminal. BellSouth has indicated that they will not allow competitive LECs to install integrated splitter/DSLAM cards into DSLAM-capable BellSouth remote terminals to facilitate remote site line sharing. With an integrated splitter/DSLAM option, the splitter separates the low (voice) and high (advanced service) frequency signals that are traveling over a single phone line into two separate streams. As briefly described above, the DSLAM then sends the voice traffic to a circuit switch and the advanced services traffic to an ATM switch. BellSouth will only consider allowing CLECs to use a splitter but not an integrated splitter/DSLAM, at the remote terminal. In addition, BellSouth requires a costly collocation arrangement at the remote terminal in order to support placement of the splitter.

13. In other words, BellSouth is essentially maintaining its prior position that it will permit competitive LECs to engage in line sharing *only* over copper facilities, by requiring competitive LECs to collocate at the remote terminal site to access the copper portion of the loop.<sup>2</sup> This position is intolerable and prevents effective competition for many consumers in both Georgia and Louisiana. Competitive LECs seeking to provide bundled voice and advanced services in competition with BellSouth are faced with three choices: (1) employ traditional copper loops to deliver inferior service quality (assuming such loops are available), (2) engage in cost prohibitive remote terminal collocation in an effort to replicate the loop architecture

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<sup>2</sup> Another option that might be considered is to have the CLEC collocate at the central office and use unbundled sub-loop fiber feeder to access the copper facilities at the remote terminal. The problem with this approach is that BellSouth would have to provide unbundled access to the NGDLC at the remote terminal or allow for collocation of line cards at the NGDLC for this arrangement to work. BellSouth has expressly stated in the BST-Line Splitting Collaborative that it will not permit collocation of line cards at NGDLC remote terminals. Further, BellSouth has made no offer of unbundled access to the NGDLC remote terminals. Finally, unbundled access to the fiber feeder would have to be more completely defined to allow access via the fiber to the remote terminal.

deployed by BellSouth assuming it is technically feasible, or (3) forego competition for the customers served by NDGLC loop technology. All three choices, for all practical purposes, have the same result – BellSouth retains its monopoly control of the market.

14. BellSouth's restrictions in this area are inconsistent with the requirement of FCC rules and Sections 251 and 271 of the Act, and allow BellSouth to remain a monopoly provider of combined voice and advanced services to Georgia and Louisiana consumers. Indeed, by BellSouth's own admission, up to *19 percent* of its loops are equipped with NGDLC, and its refusal to comply with the Commission line sharing offers effectively walls off 19 percent of the market from competition for advanced services.

#### **IV. BELLSOUTH HAS ONLY RECENTLY MODIFIED ITS PROVISION OF LINE SPLITTING AND HAS NOT FULLY DOCUMENTED THE TERMS AND CONDITIONS FOR THIS ACCESS.**

15. Until recently, BellSouth maintained an equally discriminatory line splitting policy, because it provided the splitters for competitive LEC line splitting for existing DSL customers but not for new customers. In other words, if BellSouth and a competitive LEC were engaged in line sharing, and BellSouth lost the voice customer to the competitive LEC, BellSouth would provide the splitter for the resulting line splitting situation; but BellSouth refused to make exactly the same arrangement available for a new line splitting customer (*i.e.*, one that is not migrating from a BellSouth/CLEC line sharing situation). This policy was plainly discriminatory. Indeed, since filing its Section 271 application, BellSouth has suggested that it will reverse course on this policy and provide the splitter for line splitting, although it is not yet clear exactly what BellSouth's new policy would be. And it is this lack of clarity in BellSouth's offer of its splitters for line splitting that continues to be a concern.

16. Line splitting is the ability of a competitive LEC to offer both voice and advanced services, such as data, over the same telephone line to a customer. Today, any consumer who wants this service can only obtain it from BellSouth. As the FCC's *Line Sharing Reconsideration Order* recognized, to compete effectively with BellSouth for both voice and advanced services, UNE-P CLECs must be able to offer Louisiana consumers advanced services in conjunction with voice services.<sup>3</sup> Anything less provides BellSouth with an unfair competitive advantage that shuts CLECs out of the marketplace in Georgia and Louisiana.

17. Because of the importance of advanced services in relation to competition, the Commission requires an RBOC, in connection with any Section 271 application, to demonstrate that it provides CLECs with the ability to offer bundled voice and data services using the local loop. The Commission's recent *Line Sharing Reconsideration Order* states:

We find that incumbent LECs have a *current obligation* to provide competing carriers with the ability to engage in line splitting arrangements . . . *incumbent LECs must allow competing carriers to offer both voice and data service over a single unbundled loop.*<sup>4</sup>

18. The Commission also made clear that it “expect[s] Bell Operating Companies to demonstrate, in the context of section 271 applications, that they permit line splitting, by providing access to network elements necessary for competing carriers to provide line split services.”<sup>5</sup>

The FCC went on to find that:

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<sup>3</sup> *Line Sharing Reconsideration Order* at ¶ 13 (“we find that it would be inconsistent with the intent of the Line Sharing Order and the statutory goals behind sections 706 and 251 of the 1996 Act to permit the increased deployment of fiber-based networks by incumbent LEC’s to unduly inhibit the competitive provision of xDSL services”).

<sup>4</sup> *Line Sharing Reconsideration Order* at ¶ 18 (emphasis added).

<sup>5</sup> *Id.* at ¶ 18 n.36.



“...the availability of line splitting will further speed the deployment of competition in the advanced services market by making it possible for competing carriers to provide voice and data offerings on the same line...these offerings are especially attractive to residential and small business customers”<sup>6</sup>

19. Because BellSouth has only recently modified its position relative to line splitting for CLECs and access to BellSouth’s splitters, it is unclear whether the terms and conditions that BellSouth will place on access to these splitters will actually comply with these Commission requirements to provide competitive LECs with the tools necessary for line splitting. Line splitting requires the use of a splitter, which is a passive electronic filter that is attached to the loop that is used to split or separate signals on the basis of their transmission frequencies. The splitter enables the low-frequency voice signals on the loop to be directed to a voice circuit switch and the high-frequency data signals on that loop to be delivered to a packet switching network. There is no technical reason why BellSouth cannot add a splitter when a competitive LEC using UNE-P engages in line splitting to provide a consumer bundled voice and advanced services. As such, this Commission must ensure that BellSouth’s offer of its splitters for line splitting is comprehensive and will not be filled with such holes that it presents only a hollow offer to UNE-P competitive LECs and their customers.

20. The obvious result of BellSouth’s discriminatory refusal to permit line splitting has been to permit BellSouth to “lock-up” the xDSL market before competitive LECs have a chance to provide bundled services. Line splitting will further speed the deployment of competition in the advanced services market by making it possible for competing carriers to provide voice and advanced services on the same line. Critically, line splitting is especially attractive to residential and small commercial customers. But line splitting will *not* be attractive

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<sup>6</sup> *Id.* at ¶ 23.

if all of the customer's service must be disrupted when the customer switches voice service from BellSouth to a UNE-P competitive LEC. Unless BellSouth provides the splitter in a nondiscriminatory manner, this is exactly what will happen.

21. BellSouth's technical capability to provide line splitters for competitive LEC use in the UNE-P environment is shown by the fact that BellSouth claims that it does not have a legal obligation to provide a line splitter when it engages in line sharing with another CLE, but is nonetheless willing to do so and, in fact, does so. But when a CLEC wants to provide *line splitting* with UNE-P to a new customer (i.e., one not already in a line sharing arrangement with BellSouth), BellSouth asserts a "lack of legal obligation" to refuse to provide CLECs with the splitter. Thus, BellSouth is willing to provide the splitter to competitive LECs when BellSouth continues to provide the customer with voice service. However, if BellSouth does not provide the voice portion of the customer's service, then BellSouth refuses to provide the splitter and required the competitive LEC to provide one. See Georgia SGAT §II.b.9. This is obviously not an issue of technical capability. Rather it is blatant discrimination in direct violation of Section 251(c)(3) of the Act. Moreover, the language that BellSouth continues to put forth in its SGAT remains inconsistent with BellSouth's new position vis-à-vis access to its line splitters for new customers.

22. Refusing to provide the splitter when a CLEC chooses to serve a new customer through line splitting is plainly and unreasonably discriminatory. The *Line Sharing Order* does not authorize this discrimination. Indeed, the FCC explicitly recognized in the Line Sharing Order that competitive carriers are entitled to "obtain combination of network elements and use

those elements to provide circuit switched voice service as well as data services.”<sup>7</sup> Moreover, the impact of BellSouth denying AT&T and other CLECs with access to line splitting via BellSouth splitters is new customers will not have a choice as to who can provide them with advanced bundled services. BellSouth is and will continue to be the only provider who can provide new customers with those services.<sup>8</sup>

23. Without the insertion of a BellSouth splitter, a CLEC’s only option to provide voice and advanced services to a new customer is through collocation or by using a second line. However, the FCC has found that the costs of collocation and the prospects of having to perform a hot cut, which would be necessary when the CLEC provides the splitter, represents a clear impairment to competition because of the need to disrupt the customer’s service. The FCC also found in the *Line Sharing Order* that competing via a second line stifles competition for advanced services. Most consumers want one phone line for all of their telecommunications services. The bottom line is that BellSouth’s policy of refusing to provide the splitter, except in one instance, results in a customer’s service being disrupted for no justifiable reason other than to thwart competition when competitive LECs using UNE-P want to offer advanced services.

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<sup>7</sup> *Line Sharing Order* at ¶ 47.

<sup>8</sup> Furthermore, BellSouth should be required to provide the splitter for new line splitting customers because the splitter is a part of the local loop. As the FCC’s UNE Remand Order determined, “attached electronics”, with the exception of DSLAMs are regarded as part of the loop. As indicated previously, the splitter is a passive electronic filer that is attached to the loop in order to split or separate the signals on the basis of their transmission frequencies. A splitter is incapable of reading a header, or even of distinguishing between analog and digital transmissions, and does not implement routing instructions based upon transmitted information from the customer. The fact that a splitter, can, as a matter of design convenience, be combined with a DSLAM does not mean that stand-alone splitters are involved in packet switching. Thus, because splitters are a part of the local loop and ILECs are required to unbundle the local loop, BellSouth should be required to provide the splitter for line splitting.

**V. BELLSOUTH DOES NOT PROVIDE ELECTRONIC OSS FOR ORDERING AND PROVISIONING LINE SPLITTING.**

24. BellSouth does not provide electronic operations support systems (“OSS”) for ordering, provisioning and maintaining line splitting, in violation of the *Line Sharing Reconsideration Order*. Although the Georgia Commission has ordered BellSouth to make such OSS available by January 2, 2002, it remains to be seen whether BellSouth will comply with these deadlines (which are one year after the issuance of the Line Sharing Reconsideration Order and a year and half after the Commission first clarified in the *Texas 271 Order* that incumbent LECs have an obligation to provide line splitting) and whether any OSS that BellSouth ultimately deploys will, in fact, provide nondiscriminatory access. BellSouth’s OSS history confirms that no such compliance can reasonably be assumed.

In the *Line Sharing Reconsideration Order*, the Commission stated:

[I]ncumbent LECs are required to make *all necessary network modifications to facilitate line splitting, including providing nondiscriminatory access to OSS* necessary for pre-ordering, ordering, provisioning and maintenance and repair, and billing for loops used in line splitting arrangements.<sup>9</sup>

25. I understand that Georgia has ordered BellSouth to implement OSS for line splitting by January 2, 2002. Until electronic OSS for CLEC line splitting is available, however, each and every CLEC customer order for bundled services must be handled manually. In the meantime, BellSouth continues to obtain new xDSL customers – not just new DSL customers, but new bundle customers – while AT&T and other competitive LECs who want to engage in line splitting operate at a significant disadvantage.<sup>10</sup>

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<sup>9</sup> *Line Sharing Reconsideration Order* at ¶ 30 (emphasis added).

<sup>10</sup> BellSouth has previously indicated that it anticipates winning 600,000 xDSL customers by the end of 2001. *In re: Investigation of BellSouth Telecommunications, Inc., Provision of*

**VI. BELLSOUTH FAILS TO PROVIDE NONDISCRIMINATORY ACCESS TO xDSL-CAPABLE LOOPS IN OTHER WAYS.**

26. In addition to its failure to comply with the Commission's express requirements, BellSouth continues to engage in other anti-competitive behavior relating to line splitting.

27. For example, BellSouth does not support UNE-P when it is part of a line splitting configuration. BellSouth has indicated that, in its view, "if a splitter is on a loop or is to be attached to a loop, a loop and port will lose its status as a UNE-P." *See* BellSouth Ex Parte filed with the FCC August 16, 2000, in CC Docket No. 96-98. It is unclear exactly what BellSouth means by this statement. As indicated previously, however, the splitter is nothing more than a passive electronic device; UNE-P with a splitter on the loop is no different than UNE-P used solely to provide voice service. The line sharing configuration employed by BellSouth is virtually indistinguishable from that employed when a UNE-P competitive LEC adds DSL to the loop. There is no basis to claim that UNE-P cannot be supported in the same manner as traditional voice service provided by BellSouth, and BellSouth's refusal to do so is blatantly discriminatory.

28. BellSouth also refuses to charge competitive LECs UNE-P rates when UNE-P is provided with a splitter for data services. Instead, BellSouth charges the non-recurring rates for a loop and a port. *See* Georgia SGAT § II.b.9; Louisiana SGAT, § II.b.9. As the Commission has recognized, competitive LECs must be permitted to use the same loop that was a part of a

UNE-P arrangement to provide the xDSL component of a bundled offering.<sup>11</sup> Therefore, a cost-based UNE-P rate should apply.

29. BellSouth refuses to offer splitters on a “line at a time” basis. State commissions in Illinois, Michigan, and Texas have already ordered splitters to be deployed on a line at a time basis.<sup>12</sup> BellSouth currently deploys the splitter in increments of 24 and 96 ports (lines).<sup>13</sup> There is no technical reason, however, why the splitter cannot be provisioned a line at a time. Such an arrangement would prevent the CLEC from having to expend resources for capabilities it may not use and would allow BellSouth to more efficiently utilize the splitters that it deploys. By providing splitters a line at a time, BellSouth could deploy the splitter as the CLEC obtains the customer rather than providing a CLEC with an entire shelf of splitters that may remain unused. BellSouth has not presented this Commission with any justification for refusing to deploy splitters on a line at a time to enable CLECs to economically compete with BellSouth.

30. Finally, BellSouth refuses to provide advanced services to customers who elect to migrate their voice service to a CLEC. A retail customer placed in this untenable position would be discouraged from changing voice carriers. Otherwise, the customer would face the disruption

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<sup>11</sup> *Id.*

<sup>12</sup> See Arbitration Order dated August 17, 2000 in ICC Docket Nos. 00-0312/0313 in the arbitration between Ameritech Illinois and Covad Communications Company and Rhythms Links, Inc., p. 18, for support that Ameritech must provide both line at a time and shelf at a time line splitting capability when Ameritech chooses to deploy line splitters. See also *Petition of Southwestern Bell Telephone Company for Arbitration with AT&T Communications of Texas, L.P., TCG Dallas, and Teleport Communications, Inc. Pursuant to Section 252(B)(1) of the Federal Communications Act of 1996*, Docket No. 22315, Texas Public Utilities Commission Order, March 14, 2001. See also *In the matter of the application of Ameritech Michigan for approval of cost studies and resolution of disputed issues related to certain UNE offerings*, Case No. U-12540, Michigan Public Service Commission Order, March 7, 2001.

<sup>13</sup> Requiring all particular splitters be dedicated to particular carriers (whether in blocks of 24 or 96) ties the customer to a particular DSL provider. This means that whenever the retail

of its data service available. Any action by BellSouth to disrupt a customer's advanced services stifles competition and is unreasonably discriminatory.

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customer seeks to change service providers, particularly the DSL provider, both the voice and the data service must be interrupted to permit re-termination of the loop.

